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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/040,773	12/28/2001	Benn Bollay	10547-0016-999	2128

7590 05/08/2007
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EXAMINER

SEFCHECK, GREGORY B

ART UNIT	PAPER NUMBER
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2616

MAIL DATE	DELIVERY MODE
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05/08/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No.		Applicant(s)	
	10/040,773		BOLLAY ET AL.	
	Examiner		Art Unit	
	Gregory B. Sefcheck		2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- Applicant's Amendment filed 2/28/2007 is acknowledged.
- Claims 1-25, as originally filed, remain pending.

Allowable Subject Matter

1. The indicated allowability of claims 14-20 is withdrawn in view of the newly discovered reference(s) to Mayer et al. (US007016980B1), hereafter Mayer. Rejections based on the newly cited reference(s) follow.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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3. Claims 1, 14 and 23 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 6, 1, and 21 of U.S. Patent No. 7,149,219 to Donahue. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

- Regarding Claims 1 and 23,

Claims 6 and 21 of USP 7,149,219 recite that "content filtering privileges" are also included in the received packet comprising first and second destination IP addresses.

Even though claims 1 and 23 of current application are broadened by omitting the limitation of "content filtering privileges" in claims 6 and 21 of USP 6,229,824, it has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. In re Karlson, 136 USPQ 184(CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969); omission of a reference element whose function is not needed would be an obvious variation.

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the method and computer program instructions of the current application where the received packet includes content filtering privileges, as shown in USP 7,149,219, since the method of the current application functions to determine the content filtering privileges by determining if the first destination IP address is on a list of destination IP addresses to be filtered.

- Regarding Claim 14,

"Determining filtering privileges" in claim 1 of USP 7,149,219 is equivalent to "determining request is to be subjected to a content filtering service" in claim 14 of the instant application. "User identifier" in claim 1 of the USP 7,149,219 is equivalent to "source IP address" in claim 14 of the instant application.

Further, claim 1 of USP 7,149,219 recites that packet is received at a bi-directional IP device, whereas claim 14 of the instant application recites packet is received at an IP device. Also, claim 1 of USP 7,149,219 states that second IP destination address is added to the header of the packet, whereas claim 14 of the instant application recites that second IP destination address is added to the packet.

It is known that IP destination addresses are carried in the headers of packets. And, even though claim 1 of current application is broadened by omitting the limitation of "bi-directional" in claim 6 of USP 6,229,824, it has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. In re Karlson, 136 USPQ 184 (CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969); omission of a reference element whose function is not needed would be an obvious variation.

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the method of the current application on a bi-directional IP device and to add second IP destination addresses to the header of a packet, as shown in USP 7,149,219, so that the method of the current application would be compatible with standard IP networks and devices.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. The claimed invention is directed to non-statutory subject matter.

Claim 23 is directed to a computer program product comprising a computer readable storage and a computer program comprising instructions. In contrast, a claimed computer-readable medium having instructions is a computer element which defines structural and functional interrelationships between the instructions and the processor to permit the instructions functionality to be realized, and is thus statutory. Examiner suggests changing the claim language to read "A computer-readable storage medium having stored thereon a plurality of computer-executable instructions..." (Please see pages 30 and 53 of the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-4, 7-10, 14-16, and 18-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Mayer.

- Regarding Claims 1, 3, 7, 14-16, and 21-24,

Mayer discloses a method and apparatus for analyzing one or more firewalls (Title). Referring to Fig. 1, Mayer shows that a query (packet) requesting a particular service and indicating a source and destination IP addresses is received at a firewall 120,150 (Col. 8, lines 48-53; meets claim 1,14,21,22,23 – receiving a packet containing a request for content at a content filtering router/IP device; claim 1,14,21,22,23 - packet comprising a first destination IP address of a content server).

Mayer shows that the received query is processed by simulating the behavior of all packets described by the query as the traverse the network (Col. 10, lines 10-11). This is performed by firewall analysis tool 200 (Fig. 2), which evaluates the query object against the filtering files for each gateway (filtering router) specified gateway-zone graph 300 (routing table) generated for the query (Col. 6, lines 25-40; meets claim 3,21,24 – ascertaining through which output port said packet should be forwarded based on first IP address and a routing table stored on filtering router).

Mayer shows propagating the query over all the edges in the gateway-zone graph, each edge representing a firewall (or router) interface (Col. 10, lines 27-38). Mayer shows that each firewall interface has its own unique IP address. Therefore, disclosure of the query processing in Mayer is equivalent to determining if the destination of a query is on a list of addresses to be filtered (corresponding to each

gateway/firewall) and propagating the query to the IP addresses of each of those multiple gateway/firewall (levels of filtering routers) thus determined (meets claim 1,14,21,22,23,24 – determining if first destination IP address is on a list of addresses to be filtered; claim 1,14,21,22,23,24 – packet comprising/adding second destination IP address of content filtering router; claim 1,21 – routing packet to an output port on filtering router based on first destination IP address and list; claim 14,22,23,24 – sending packet toward content filtering router; claim 7 – sending packet to an additional content filtering router, packet comprising third IP address; claim 15 – prior to adding, determining how many filtering levels the request is subject to; claim 16 – adding additional IP address for each level).

Each gateway node inherently comprises a CPU and memory containing an operating system for carrying out the above-described procedures (instructions; meets claim 21,22 – filtering router comprising CPU and memory containing operating system; claim 23 – computer readable storage containing stored computer program of instructions).

- Regarding Claims 2 and 8,

Mayer discloses a method and apparatus for analyzing one or more firewalls that meets all limitations of the parent claim.

Mayer shows that the service requested by a query will not be provided to a user until a “pass” or “drop” (blocked) action is verified at each gateway specified in the query (Col. 5, lines 45-47; meets claim 2 – determining comprises ascertaining that first IP

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address is on list; claim 2 – routing comprises directing packet someplace other than first IP address; claim 8 – sending packet to a service provider that can notify a user who made request that content has been blocked).

- Regarding Claims 4, 9, and 10,

Mayer discloses a method and apparatus for analyzing one or more firewalls that meets all limitations of the parent claim.

Mayer shows that the firewall's configuration interface defines the ranges of IP addresses, the protocols and corresponding port-numbers (Col. 5, lines 38-43; Col. 6, lines 5-10; meets claim 4 – utilizing a routing protocol to determine said output port; claim 9 – accepting first IP address and associated output port; claim 9 – storing first IP address and associated output port in list; claim 10 – storing comprises saving first IP address and associated port in routing table).

- Regarding Claims 18-20,

Mayer discloses a method and apparatus for analyzing one or more firewalls that meets all limitations of the parent claim.

Mayer shows that the query processing commences by performing a gateway-zone graph search according to the source host-group and the service (indicator) of the query (Col. 10, lines 14-26; meets claim 18 – acquiring source IP address and indicator of whether content filtering service is to be applied; claim 18 – storing source IP address and indicator; claim 19 – obtaining a filtering level associated with source IP address)

As shown above, the graph search evaluates the query object against each rule-base for each gateway node in the graph (Col. 10, lines 23-26; meets claim 20 – acquiring list of filtering levels and associated additional IP addresses, each filtering level associated with different additional IP address of different filtering router; claim 20 – storing list of filtering levels and associated additional IP addresses).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 11-13, 17, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mayer.

- Regarding Claims 11-13, 17 and 25,

Mayer discloses a method and apparatus for analyzing one or more firewalls that meets all limitations of the parent claim.

Mayer does not explicitly disclose routing content requests to the content server and receiving the content without forwarding the requests to any filtering routers when the first IP destination is not included on a list of addresses to be filtered.

It is inherent that, if a query is not restricted in the filtering files of any gateways, it will be allowed to pass unrestricted (claim 11 – ascertaining that first IP address is not

on list; claim 12 – removing second IP address from packet; claim 13 – directing packet toward first IP address; claim 17,25 – receiving content from server, where first IP address was not on a routing table of filtering router).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the method and apparatus of Mayer by routing content requests to the content server and receiving the content without forwarding the requests to any filtering routers when the first IP destination is not included on a list of addresses to be filtered, thereby completing the content request since no filtering is required.

9. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mayer in view of Shah (US006260070B1).

- Regarding Claims 5 and 6,

Mayer discloses a method and apparatus for analyzing one or more firewalls that meets all limitations of the parent claim.

Mayer does not explicitly disclose the use of BGP or a BGP routing table.

Shah discloses requesting and selecting services available over the Internet by utilizing border gateway protocol, including referencing a BGP routing table (Abstract; Fig. 5; claim 5 – routing protocol is BGP; claim 6 – routing table is BGP table).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the method and apparatus of Mayer by utilizing Border Gateway Protocol and BGP routing tables, as shown by Shah. This would enable the method of

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Mayer to be applied to networks utilizing BGP for communication between gateways in a network.

Response to Arguments

10. Applicant's arguments with respect to claims 1-25 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Coss et al. (US006154775A)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory B. Sefcheck whose telephone number is 571-272-3098. The examiner can normally be reached on Monday-Friday, 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GBS *GBS*
4-30-2007

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